IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Muraleedhara Herur Navada et al.	Art Unit	: 2616
Serial No.	: 10/749,792	Examiner	: Nguyen Hoang Ngo
Filed	: December 31, 2003		
Title	: PACKET FORWARDING		

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Pursuant to United States Patent and Trademark Office OG Notices: 12 July 2005 - New Pre-Appeal Brief Conference Pilot Program and 07 February 2006 - Extention of the Pilot Pre-Appeal Brief Conference program, a request for a review of identified matters on appeal is hereby submitted with the Notice of Appeal. Review of these identified matters by a panel of examiners is requested because the rejections of record are clearly not proper and are without basis, in view of a clear legal and factual deficiency in the rejections. All rights to address additional matters on appeal in any subsequent appeal brief are hereby reserved.

Claims 1-14, 21-23 and 27-31 are pending with claims 1, 8 and 21 being independent. In the Office Action dated November 26, 2007, the Office rejected claim 7, 14, 30, 31 under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement. Claims 1-14 and 21-23, and 27-31 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 20030147412 to Weyman et al. ("Weyman") in view of U.S. Patent No. 5,721,820 to Abali et al. ("Abali").

Rejections under 35 U.S.C. § 112

The Office contends that the specification fails to disclose the claimed "modifying the vector" as recited in claims 7, 14, 30, 31. The contention is in error and the rejections are respectfully traversed.

The specification teaches "changing the logic stored in the device vector" (see Specification at page 13, lines 1-13), which is modifying the vector. Apparently, the Office

Action has completely ignored this portion of the specification. Thus, the rejections under 35 U.S.C. § 112 are in error and should be withdrawn.

Rejections under 35 U.S.C. § 103(a)

Claims 1-14 and 21-23, and 27-31 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Weyman in view of Abali. The rejections are respectfully traversed.

Claim 1 and its dependent claims

The Office concedes that Weyman fails to teach or suggest the claimed "when detecting that the at least one other packet forwarding device in the stack is to receive the packet before reaching the identified destination device, inserting a vector in the received packet, wherein the vector includes data that identifies the identified destination device and the at least one other packet forwarding device in the stack of packet forwarding devices to receive the packet." Then the Office mistakenly alleges, without factual evidence to support the contention, that Abali cures the deficiencies of Weyman.

For example, the Office contends that "Abali further discloses of a source routing protocol in which the packet route Information (inserting vector which includes data that identifies the identified destination device and the at least one other packer forwarding device) is embedded into the packet by the source node (lead node) and that the source processor (lead node) determines the route and encodes the routing instructions in the packet header and that each word in the header indicates a switch port (id for destination device and at least one other packet forwarding device) to forward the packet to (col 1 lines 25-65 and figure 2-4)." (See Office Action Dated November at page 4.) Thus, the Office mistakenly believes that the source node/processor in Abali is the claimed packet forwarding device that inserts the vector in the received packet. However, claim 1 requires that "the packet forwarding device that received the packet from the source device" inserts the vector. (Emphasis added.) In contrast to claim 1, the source node/processor in Abali is a source device external to the stack and not the claimed packet forwarding device that inserts the vector in the received packet. (See, Abali at column 1, lines 46-51; column 3, lines 17-20.)

> "In the source based routing scheme, unlike destination base routine, switches need not know the network topology; the source processor determines the route

> and encodes the routing instructions in the packet header. Switches then follow these instructions to forward the packet to its destination."

(See, Abali at column 1, lines 46-51.)

> "The source processor places the route words in the packet. A switch receiving the packet examines the first route word to determine which output port the packet is to be routed to."

(See, Abali at column 3, lines 17-20.)

In Abali, the route words are inserted by the source processor and not the switches that received the packet. Even the label, "source processor" contradicts the rejections. "Source" indicates that the packet originates from it, and "processor" indicates that it is a device that processes information and not a forwarding device such as the switch in Abali. Because the source processor in Abali is not the packet forwarding device that received the packet, the descriptions of the source processor in Abali fail to support the rejection.

In addition, the source processor in Abali does not perform the claimed "when detecting that the at least one other packet forwarding device in the stack is to receive the packet before reaching the identified destination device, inserting a vector in the received packet, wherein the vector includes data that identifies the identified destination device and the at least one other packet forwarding device in the stack of packet forwarding devices to receive the packet." In contrast to claim 1, the source processor in Abali determines the various paths or ways for sending the packet through various switches and embeds the route words in the data packet header. (See, Abali at column 3, lines 17-20; column 3, line 49 – column 4, line 5.) Then, the switch receiving the packet examines the received packet to selects one of the paths that is available. (See, *id.*)

> The switch routes the packet adaptively: when the packet arrives at the switch, the switch will search for an unused port from the set of ports indicated in the first route word, in this example, the ports are 0, 1, 4. If none of the ports are available, then the packet is blocked. The packet cannot proceed until at least one of the ports is cleared.

(See, *id.* at column 3, lines 40-48.)

Because the source processor in Abali is not the packet forwarding device that received the packet, the source processor is not able to determine which path is actually available. The source processor merely suggests choices of paths for the switches to use when forwarding the packet.

Thus, even if arguendo, Weyman and Abali could somehow be combined, which is not conceded, a hypothetical combination of Weyman and Abali still would fail to teach or suggest each and every feature of claim 1.

Moreover, in addressing the recent KSR decision, the U.S. Patent & Trademark Office (USPTO) has made clear that, "in formulating a rejection under 35 U.S.C. 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed." (See Memorandum dated May 3, 2007, to Technology Center Directors from Margaret A. Focarino, Deputy Commissioner for Patent Operations, re Supreme Court decision on KSR Int'l. Co., v. Teleflex, Inc., emphasis added). The current Office Action suggests that it would have been obvious to "incorporate the concept of source based routing in which [ ] routing information (vector) is inserted into a packet as disclosed by Abali into the method of routing data through stacked network routers as disclosed by Weyman in order to correctly and efficiently communicate data through a stacked routers. (See Office Action Mailed November 26, 2007 at page 4, line 18 – page 5, line 2.) However, this ignores the fact that Abali teaches having the source processor embed route words into the packet for the switches to receive. The source processor that determines the possible paths in Abali is not compatible with Weyman because the source processor removes the decision making process from the lead switch mechanism in Weyman and renders the lead switch in Weyman inoperable. Thus, the proposed combination is unreasonable because the very natures of Weyman and Abali teach away from combining their teachings.

For at least these reasons, claim 1 is allowable over the proposed combination of Weyman and Abali. Claims 2-7 depend from claim 1 and are allowable for at least the same reasons.

Claim 8 and its dependent claims

Claim 8 is allowable for at least reasons similar to claim 1. Claims 9-14 depend from claim 8 and are allowable for at least the same reasons.

Claim 21 and its dependent claims

Claim 21 is allowable for at least reasons similar to claim 1. Claims 22-23 and 27-31 depend from claim 21 and are allowable for at least the same reasons.

CONCLUSION

The foregoing comments made with respect to the positions taken by the Examiner are not to be construed as acquiescence with other positions of the Examiner that have not been explicitly contested. Accordingly, the above arguments for patentability of a claim should not be construed as implying that there are not other valid reasons for patentability of that claim or other claims.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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